Lab 11 – Agents in Counter Strike Comparative Study

Objectives

▪Compare the explored agent architectures in the project

Exercise

One of the project's goals is to compare the agent architectures. In order to do so, you should test teams against each other, where all members of a team are from the same type of agent: a team of (1) reactive agents, a team of (2) deliberative agents (without cooperation), a team of (3) cooperative deliberative agents, and a team of (4) agents with the additional topic included.

1. Start by confronting the reactive agents against the deliberative agents. Repeat the test and register the results in a table.
2. Think about the method for evaluating the agents so that the results show a fair and truthful comparison between them. E.g: which scoring policy will you use to determine the best mind? How many agents per team shall be used? What are the game conditions? How many rounds? How much time per round?
3. Repeat the tests taking into account the previous remarks.

We recommend using the tournament mode. This mode automatically initializes testing conditions through the file `tournament.cfg` and collects, into a persistent format, game data

To run in tournament mode, proceed as follows:
1. Create a copy of `addons/aasmCsAgents/*` in `addons/aasmCsAgents2/*`
2. Edit the file `addons/metamod/plugins.ini` to:
   ```
   win32 addons/aasmCsAgents/dlls/aasmCsAgents.dll
   win32 addons/aasmCsAgents2/dlls/aasmCsAgents2.dll
   ```
3. Associate the "`tournament`" tag to the respective classes in the `createTerroristAgent` and `createCounterTerroristAgent` methods in the `game/gui.cpp` file
4. Compile and copy the dll to a temporary location (e.g. desktop)
5. Define the variable `AASM_GROUP_ID` in `modApi.h`
   ```
   #define AASM_GROUP_ID "2"
   ```
6. Recompile the code
7. Rename the dll to `aasmCsAgents2.dll`
8. Copy the dll `aasmCsAgents.dll` to `addons/aasmCsAgents/dlls`
9. Copy the dll `aasmCsAgents2.dll` to `addons/aasmCsAgents2/dlls`
10. Configure the testing conditions in `addons/tournament.cfg`
    Note: Don't forget to set the variable `isTournamentOn` to `true`
11. Run the game
12. When the game ends, collected data shall be saved in text and xml files in the `addons` directory